KrimpVark

KrimpVark

Super long standby and High-definition audio

USER'S MANUAL

RTS

RTS Help Line

Dear client should you experience any difficulties or problems on your RTS Product (s) please feel free to contact our office at

086100 2525

Weekdays between 08H00 and 17H00

We will gladly assist you with your purchased RTS Product (s)

This radio have been programed with the following factory defaults:
Channel 1-8 with CTCSS 94.8 Hz

Channel 9-16 with CTCSS 131.8Hz

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Introduction

Thanks for purchasing RTS Krimpvark radio. Please read this manual carefully to learn its functions and operations before using.

With mini compact size, stable performance, and easy-to-use feature, transceiver Krimpvark is developed for wide using. It offers you a normal communication when you are in the rural area, forest zone, pasturing area or sea area. The fine appearance of Krimpvark meets your needs of personality.

Unpacking and check the devices

Please take the radio out carefully from the package, and check again before disposing of the packing to make sure that all the following items are contained in the packaging. If any of them are missing or damaged during transportation, please contact with the vendor for service.

Accessories list

Description	Unit	Quantity
Antenna	pc	1
Belt clip	pc	1
Lithium battery pack	pc	1
Charger	pc	1
Wrist string	pc	1
Warranty card	pc	1
QC passed card	pc	1
User Manual	book	1

Main Feature

1、400--470MHz full frequency

2、Chinese and English channel report

3、High and low power optional

4、wide and narrow band optional

5、CTCSS/50 and DCS/83 squelch system to avoid the disturbance from other radio station.

6、VOX function ,free your hands， easy operation

7、BCL（busy channel lock）function to know the busy state

8、SCAN function, scan all the channels

9、Built-in FM-radio to know the latest new at anytime.

10、power-save function to make the standby time longer.

All the above functions are edited by PC programming software. And the transceiver has the following functions itself：

1. Emergency alarm function gives you more peace.

2. Rime elimination function will eliminate the noise when stop talking.

Technical Information

GENERAL

Frequency range

400MHz-470MHz

Number of channel 16

Channel spacing 12.5kHz / 25kHz

Modulation method FM

Operating temperature range －10℃ --- ＋55℃

Voltage 3.7V---4.2V

Standby Current about 10mA（Save Power State）

Size 95(H) × 53(W) × 30(D)mm

Weight about 135g

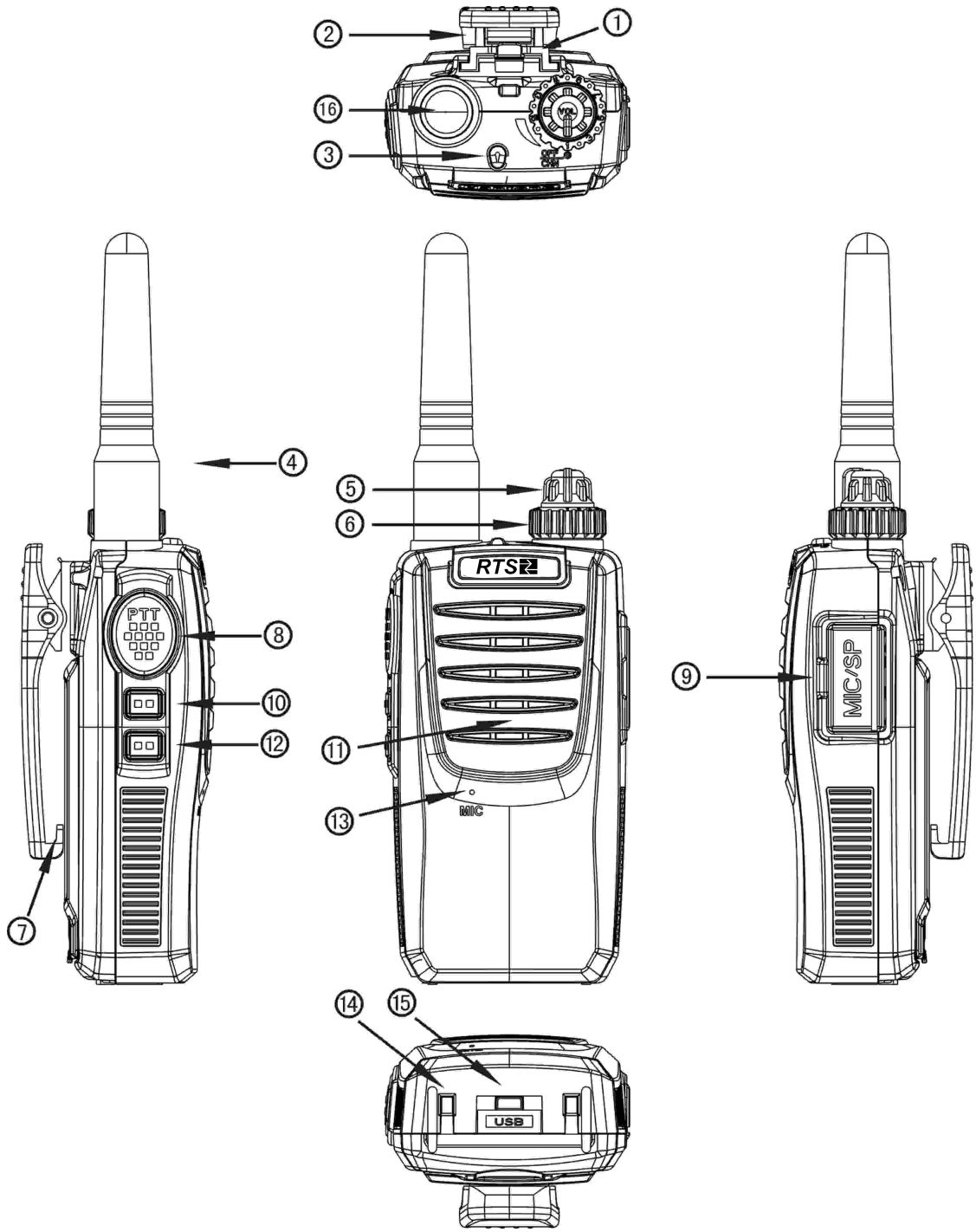
TRANSMITTER

Frequency stabilization	≤5ppm
Output power	≤3.5W
Emission current	≤1.3A
Maximum frequency deviation	±5kHz
Audio distortion	<10%
Adjacent channel power	<70dB
Residual radiation	<-60dB

RECEIVER

Reference sensitivity (12dB SINAD)	<-122dBm
Sensitivity lock	<-126dBm
Audio Power	≥500mW
Receiving current	≤300mA
Audio distortion	<10%
Adjacent channel selection	≥60dB
Intermodulation rejection	≥60dB

Identification



1. Pendent hole 2.Belt Clip Stator

3. Indicated Light 4. Antenna

5 .Volume Knob 6. Channel Knob;

7. Belt Clip; 8. PTT

9. Earphone Jack

10. FM Radio/Monitor/Reception+

11. Speaker 12. Call/Reception-

13. MIC 14. Charging Contact Plate

15. USB Charging Jack 16. Antenna Terminal

Preparation before Using

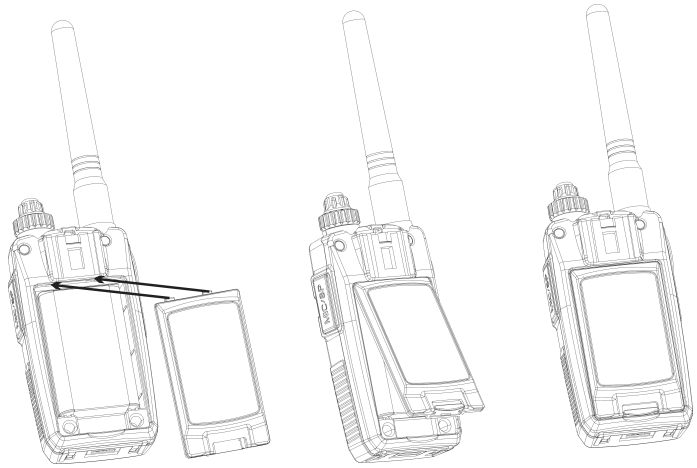
Install Lithium battery pack

Install the battery rear case properly as following pictures show

Picture1 picture2

Install battery rear case

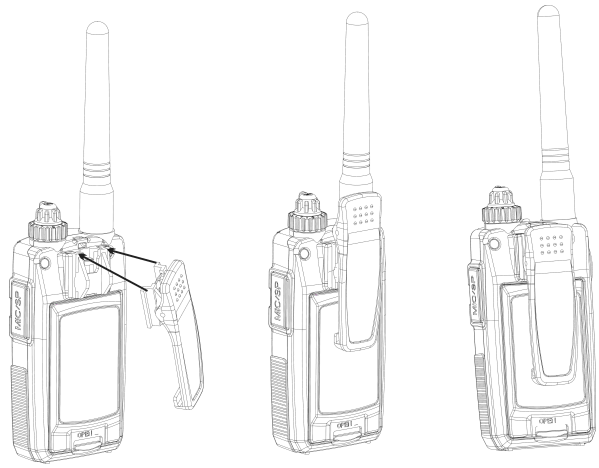
Install the battery rear case properly as following pictures show



Picture1 picture2 picture3

Fix the belt clip

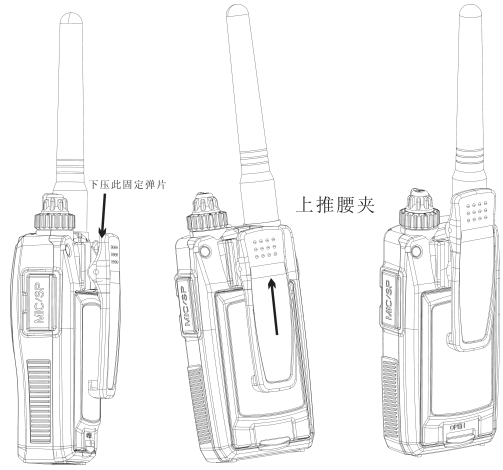
fix the belt clip properly as the following pictures show:



Picture1 picture2 picture3

Take off the Belt Clip

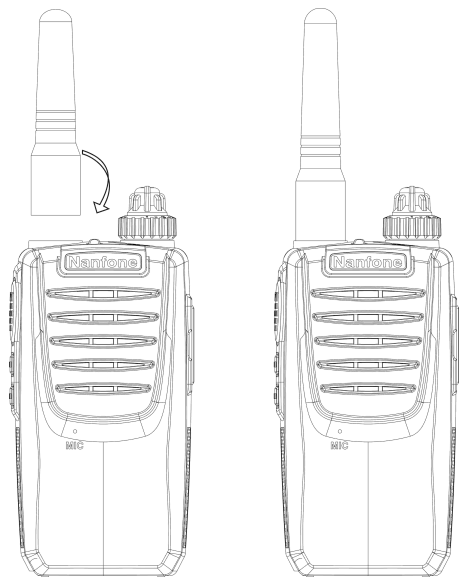
Press the belt clip stator (as arrow shows) as following picture 1 shows, push up the belt clip as the arrow of picture 2 shows, then take off the belt clip as picture 3 shows.



Picture1 picture2 picture3

Install the Antenna

Rotate the antenna clockwise into the antenna terminal as the arrow of picture 1 shows, and then tighten the antenna as picture 2 shows.



Picture1 picture2

Charging the Lithium Battery Pack

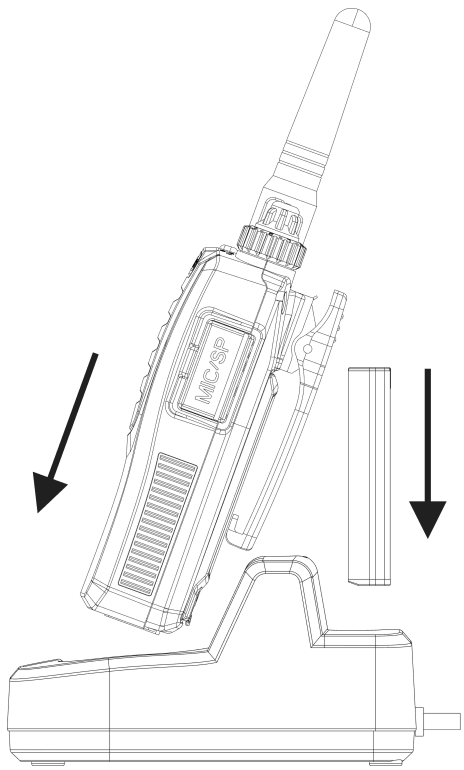
The battery pack is without completely charging when finished, and please charge it before using.

When used for the first time after purchased or stored over two months, the capacity of battery pack is less than normal. However, it will return normal after charged and discharged for three or five times.

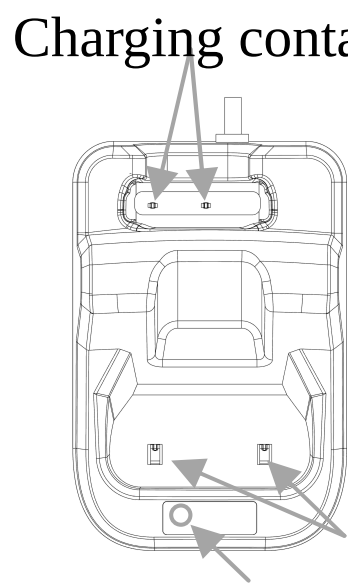
Green light shines when start charging, red light is on while it is charging and the green light indicate that the charging is finished.

Note：KRIMPVARK has two independent charging channels for the whole machine and battery pack, but it cannot charge by the two way at the same time, otherwise it will be failed charge.

t would take about 6 hours to charge full.



Picture1



Picture2

Software programming setting

PC programming method

1．Please visit **http://www.repeater.co.za** and download the Krimpvark programming software.

Operation Guide

Transmit

1．Hold 【**PTT**】after the red light is on to talk and lose the button to stop.

Monitor

1． Short-press【**Radio/Monitor/Reception+**】按 to open noise in force and press it again to exit.

Audio call

1．Press 【**PTT**】to transmit and then 【**Radio/Monitor/Reception+**】to open audio call function（1750KHz），the transceiver emits 1750KHzaudio frequency，lose

【**Radio/Monitor/Reception+**】to exit.

FM-radio function operation

1. Press 【**Radio/Monitor/Reception+**】功 in 2s when heard ”di” to open FM-radio. Press 【**Radio/Monitor/Reception+**】**or** 【**Call/Reception-** 】 to scan automatically, and it will stop when coming to the radio which has signals. For other radio station, please press 【**Radio/Monitor/Reception+**】**or** 【**Call/Reception-**】。

Emergency alarm

1. press【**Call/Reception-**】in 2s to open the emergency alarm function. Here the red light of the station is on and the acoustic alarm is heard and sent to the same frequency transceiver; Press【**PTT**】to stop the function.

The transceiver will remain at channel 01 when you operate the Emergency Call Function,

until rotate the channel selector to your desired channel. The green indicated light will flash if you didn’t rotate the channel selector after operating the Emergency Call Function.

Low Power Detection

1. The device works properly, when the voltage is higher than 3.6V;

2. When the voltage is among 3.4V to 3.5V, the transceiver receives normally but with alerts and “dididi” indication every 20secs, and launches normally, but the light flashes red while launching.

3. When the voltage is below 3.3V, then the transceiver will power off by itself.

Maintenance

Transceiver KRIMPVARK you purchased is an exactitude design electronic products and please use it carefully. Following maintenance ways may help extend its lifetime.

1、lease don’t try to disassemble the transceiver because non-technicians’ processing may cause damage to the device.

2、Don’t use or charge the transceiver in explosive condition（The air contains a lot of fine sand, dust, and a place where a large number of chemicals）

3、Turn off the transceiver when you are in gas station.

4、Please don’t put the transceiver in sun or hot place for long time, because the high temperature will shorten use life of electronic parts and cause

distortion to plastic parts.。

5、Please keep the transceiver dry, because rain and moisture will erode the electronic circuits.

6、Please power off the transceiver and remove its battery pack immediately once there is peculiar smell or smog emit from the device.

Troubleshooting

Trouble	Solution
No reaction when power-on	● The battery pack has been exhausted. Please change a new battery or recharge the battery. ● The battery pack may be not installed correctly. Please install it again.
Unable to talk with other members in the same group	● Please check the frequency and CTCSS/DCS you use are the same as other members use in the same group. ● The distance between you and other group members may be too far. Please check if you are in the cover range of other group transceivers
Talking distance is short	● Make sure the antenna screws tight and contact well ● Make sure if using the original antenna from the manufacturer. ● The dealer or user set the higher squelch lever, please reduce the lever.。

Other (not from group members) sound heard in channels.	● Change the frequency ● Please change your CTCSS/DCS NO. And it has to change all signal sound of the group transceivers.
The battery used out soon after recharged.	● The use-life of the battery is over, please change new battery. ● If the battery has been completely charged
People receive your Voice is low or broken	Check if the MIC hole is jammed
Water inlet	● Take out the battery at once when water inlet and dump the water, put it in a draft to dry it. Make sure to send it to maintenance station in a short time.

Appendix: CTCSS and DCS list

50 CTCSS

67.0	85.4	107.2	136.5	165.5	186.2	210.7	254.1
69.3	88.5	110.9	141.3	167.9	189.9	218.1	
71.9	91.5	114.8	146.2	171.3	192.8	225.7	
74.4	94.8	118.8	151.4	173.8	196.6	229.1	
77.0	97.4	123.0	156.7	177.3	199.5	233.6	
79.7	100.0	127.3	159.8	179.9	203.5	241.8	
82.5	103.5	131.8	162.2	183.5	206.5	250.3	

83 DCS

023	051	114	143	174	251	315	371	445	532	631	723
025	054	115	152	205	261	331	411	464	546	632	731
026	065	116	155	223	263	343	412	465	565	654	732
031	071	125	156	226	265	346	413	466	606	662	734
032	072	131	162	243	271	351	423	503	612	664	743
043	073	132	165	244	306	364	431	506	624	703	754
047	074	134	172	245	311	365	432	516	627	712	

RTS HULPLYN

Geagte klient indien u enige probleme ondervind, skakel gerus die volgende telefoon nommer:

086100 2525

Tussen 08H00 en 17H00 weeksdae

Ons sal u met graagte te hulp wees

U radio is soos volg geprogrammeer

Kanaal 1-8 op CTCSS 94.8 Hz

Kanaal 9-16 op CTCSS 131.8Hz

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Bylaag: CTCSS QT en DCS DQT Tabel 19

Inleiding

Dankie vir die aankoop van RTS Krimvark lisensievrye produk. Lees asseblief hierdie boekie sorgvuldig deur en bestudeer die funksies en hoe om die radio te gebruik voordat u dit gebruik.

Hierdie klein kompakte tweerigtingradio is stabiel, maklik om te gebruik, en is ontwikkel vir verskeie gebruikers areas, bv. dit bied u uitstekende kommunikasie in die veld, bosbou, bergklim, strandgebiede ensovoorts.

1 NAGAAN VAN VERPAKKING

Verwyder radiotoerusting versigting uit die verpakking. Maak seker dat hierdie toerusting en bybehore in die verpakking is. Behou u verpakking vir waarborg doeleindes. Indien daar enige van onderstaande item(s) weg is, beskadig is as gevolg van vervoer, kontak u handelaar sonder versuim.

Bybehore Lys

Beskrywing	Eenheid	Hoeveelheid
Antenna	elk	1
Belt knip	elk	1
Lithium Battery pak	elk	1
Laaier 230V	elk	1
12V laaier	elk	1
Oorfoon met mikrofoon	elk	1
Krimvark radio	elk	1
Gebruikaanwysing boekie	boek	1

Hoofkenmerke

1、Wye band 400--470MHz

2、Engels kanaal aankondiging

3、Hoog en lae krag uitset verstelling

4、Wye of nou bandwydte

5、CTCSS/50 en DCS/83 squelch sisteem om mede kanaal gebruikers te voorkom of onnodige steurnisse.

6、Handvrye stem beheerde uitsending.

7、Besige kanaal transmissie uitsluiting.

8、Skandeer funsie, skandeer alle kanale

9、Ingeboude FM radio, luister na u gunsteling nuusstasie.

10、Battery besparing fasiliteit, verleng die battery bystandkrag.

Bostaande funksies kan verader word deur rekenaar programmering, vra u handelaar gerus

Tegniese Informasie

Algemeen

Frekwensie band	400MHz-470MHz
Aantal kanele	16
Kanaalwydte	12.5kHz / 25kHz
Modulasie metode	FM
Gebruik temperatuur	－10℃ --- ＋55℃
Spanning	3.7V---4.2V
Bystand kragverbruik	omtrent 10mA
Grote	95(H) × 53(W) × 30(D)mm
Gewig	omtrent 135g

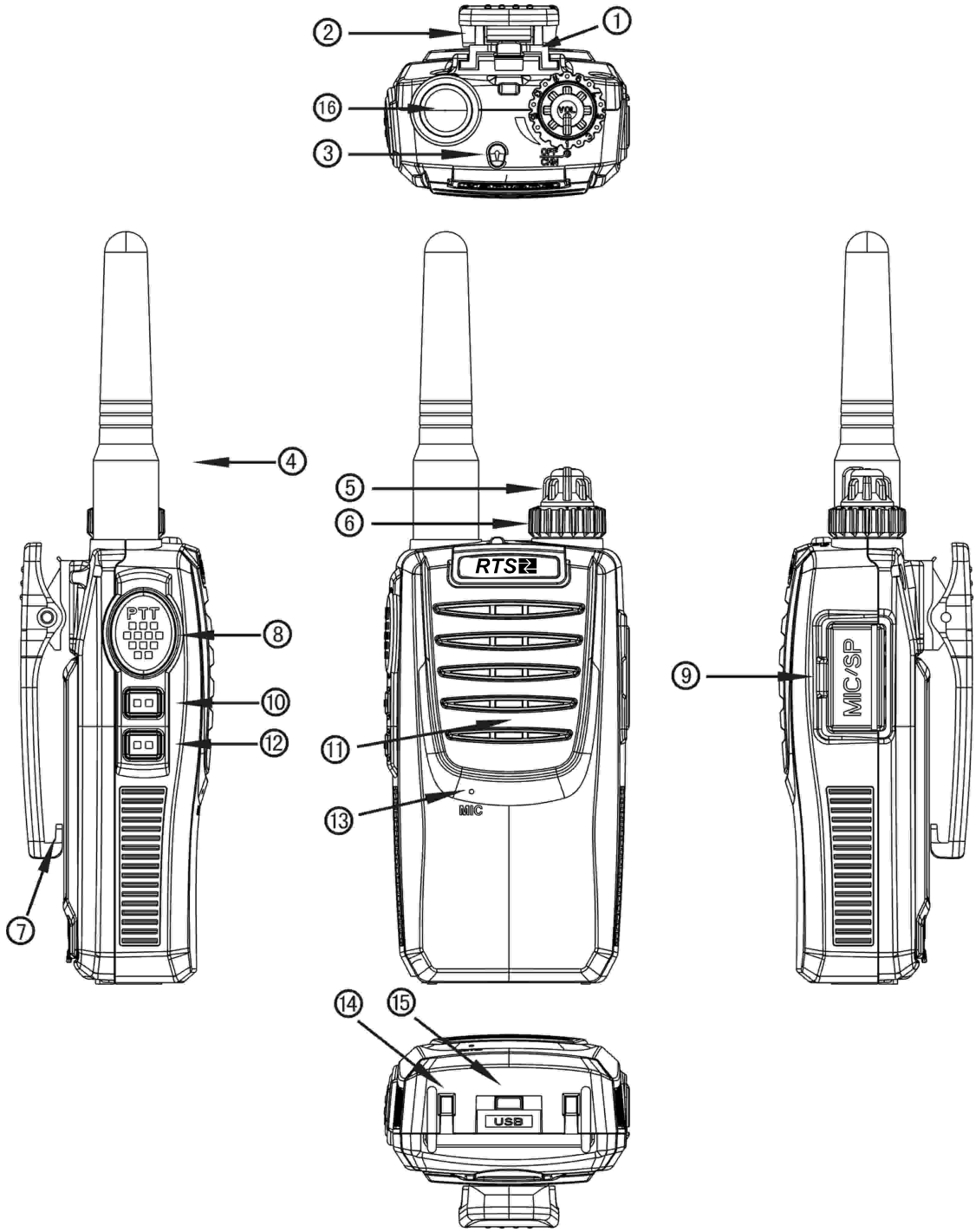
TRANSMITTER

Frekwensie stabiliteit	≤5ppm
Uitsetkrag	≤2 W
Transmit kragverbruik	≤1.3A
Maksimum deviasie	±2.5kHz
Klank versteurings	<10%
Sykanaal krag	<70dB
Residual radiasie	<-60dB

ONTVANGER

Ontvangersensitiwiteit	<-122dBm (12dB SINAD)
Sensitiwiteit oopmaak	<-126dBm
Audio klank	≥500mW
Ontvanger kragverbruik	≤300mA
Audio verwronging	<10%
Sykanaal selektiwiteit	≥60dB
Intermodulasie verwerping	≥60dB

Identifikasie



1. Hanger gaaitjie 2.Beltknip

3. Indikasie liggie 4. Antenna

5 .Volumeknop 6. Kanaalknop

7. Beltknip 8. PTT

9. Oorfoon punt

10. FM Radio/Monitor/Ontvangs+

11. Luidspreker 12. Roep/Ontvangs-

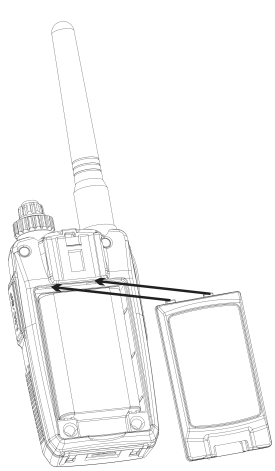
13. Mikrofoon 14. Laai kontak Punt

15. USB Laaiprop 16. Antenna Terminaal

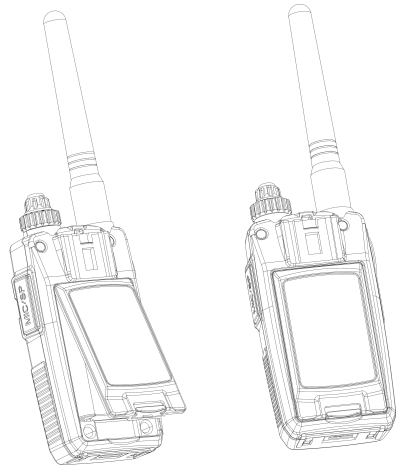
HOE OM TE GEBRUIK

Installeer Lithium batterypak

Installeer die battery agter in die radio, volg die sketse noukerig



Skets1



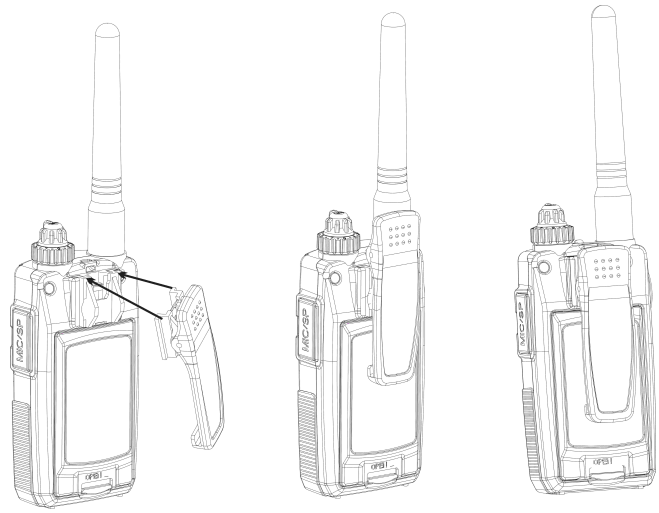
Skets2

Installeer battery klappie

Installeer die batteryklappie deeglik soos hierbo aangewys.

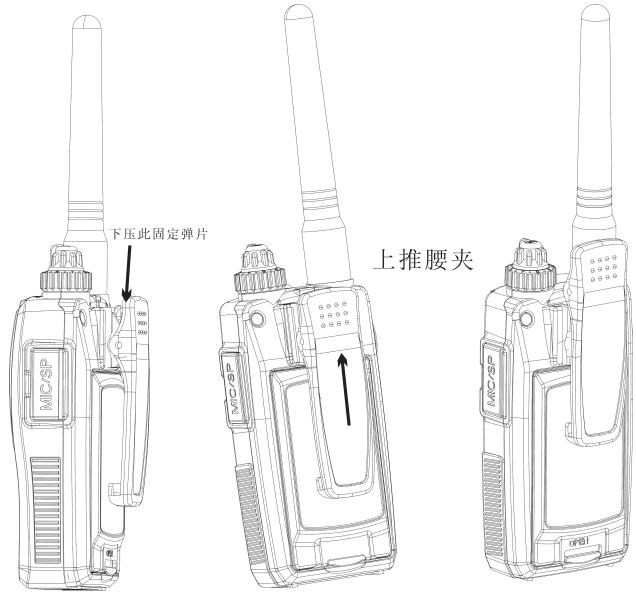
Installeer beltknip

Skuif beltknip in plek soos hieronder aangedui.



Om beltknip te verwyder

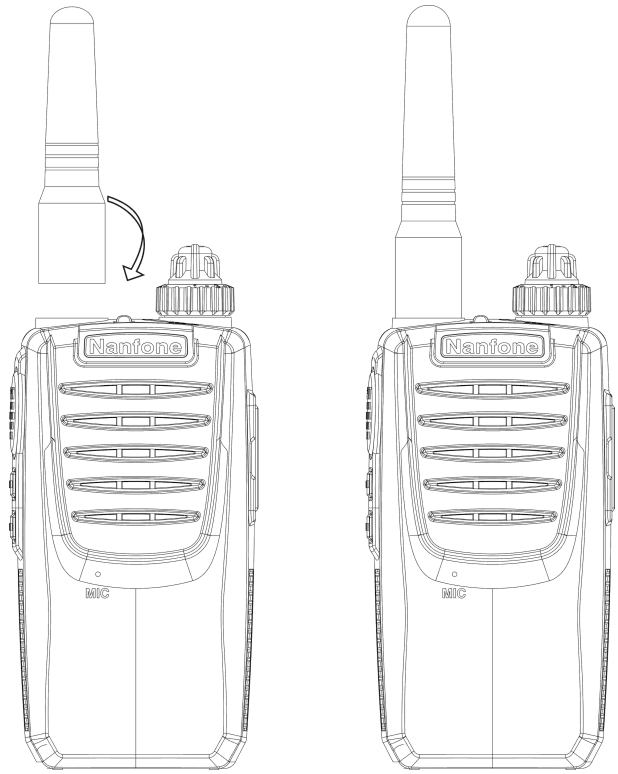
Druk beltknip pennetjie soos in skets 1. Druk nou die beltknip in die rigting van die pyltjie soos in skets 2, verwyder nou beltknip soos in skets 3.



Skets 1 Skets 2 Skets 3

Installeer die Antenna

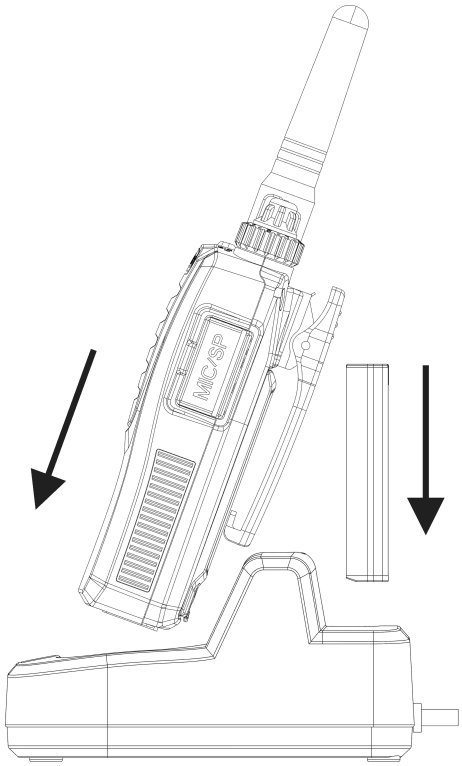
Skroef die antenna kloksgewys soos in skets 1 in die antenna terminal, wees versigtig om antenna nie oordraad te draai nie, voltooi antenna installasie soos in skets 2



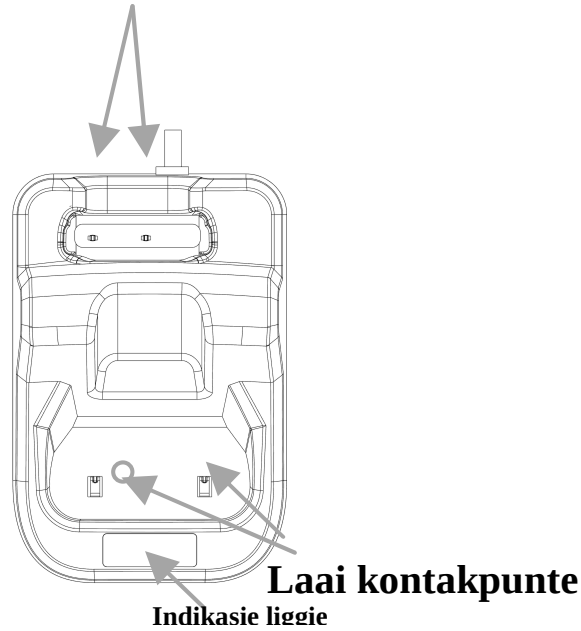
Skets 1 Skets 2

Laai van Lithium Batterypak

Die batterypak is by vervaardiging nie volledig gelaai nie, laai batterypak nou.



Skets 1



Skets 2

Programmering van Sagteware

Om rekenaar programmering sagteware te bekom besoek gerus http://www.repeater.co.za，en laai die Krimvark sagteware af.

Gebruikaanwysings

Transmit

1．Druk die uitsaaiknoppie 【**PTT**】 nadat die rooi indikasie liggie begin brand, praat dan, sodra u klaar gepraa,t het los die uitsaaiknoppie.

Monitor

1． Druk vinnig 【**Radio/Monitor/Ontvangs+**】 Knoppie om na geraas te luister druk weer om te herstel.

2． Audio oproep

1．Druk 【**PTT**】en ook 【**Radio/Monitor/Reception+**】om die audio roep te aktiveer. Die radio sal nou ‘n audio sein van

1750KHz uitsaai terwyl u die

【Radio/Monitor/Ontvangs+】inhou.

FM-radio aaanskakeling

1. Druk **【Radio/Monitor/Ontvangs+】**knoppie in vir 2sekondes totdat u ”di” klank hoor, nou is die FM-radio aangeskakel

2. Druk**【Radio/Monitor/Ontvangs+】of 【Roep/Ontvangs- 】** om outomaties te soek vir ‘n FM radiostasie, indien u na ‘n ander radiostasie wil soek druk **【Radio/Monitor/Ontvangs+】of 【Roep/Ontvangs-】**。weer.

Nood Alarm

1. Druk **【Roep/Ontvangs-】** knoppie vir meer as 2sekondes om alarm te maak. Die rooi indikasie liggie sal nou flikker, die alarm word uitgesaai op kanaal 01 en u sal ook ‘n alarm klank oor die

luidspreker hoor. Druk die【**PTT**】om alarm te kanselleer.

Die radio sal op kanaal 01 bly totdat u die kanaal selekteerde knoppie draai. Die Groen indikasie ligie sal flikker tot en met u die kanaal verander.

Lae Battery Indikasie

1. Die radio funksioneer normaalweg wanneer die battery spanning bokant 3.6V is;
2. Wanneer die battery spanning tussen 3.4V tot 3.5V is, sal die radio normaalweg funksioneer maar u sal ‘n “dididi” klank hoor so elke 20sekondes, en die indikasie liggie flikker rooi.

3. Wanneer die battery spanning onder 3.3V is, sal die radio outomaties afskakel.

Versorging

Krimpvark tweerigting radio wat u aangekoop het is ‘n elektroniese apparaat. Volg onderstaande versorging om sodoende die lewe van u toerusting te verleng.

1. Moet asseblief nie prober om die radio produk oop te maak nie, aangesien daar binne-in geen versienbare onderdele is nie.

2、Moet die radio nie in fyn stowwerige gebied of waar daar fyn ystervylsels kan wees gebruik nie. Ook nie in ‘n gebied waar daar chemikalie is nie.

3、Skakel u tweerigtinradio af wanneer u brandstof ingooi.

4、Moet nie die tweerigtingradio in die son of in warm area vir lang periodes los nie. Hoe temperature sal die elektroniese onderdele se lewe verkort. Dit kan ook die plastiese omhulsel versteur.

5、Hou die tweerigtingradio droog, want reen en water kan die elektroniese stroombane beskadig.

6、 Skakel die tweerigtingradio onmiddellik af indien daar rook of reuke uit die radio kom.

Probleem oplossing

Probleem	Oplossing
Geen reaksie wanneer die radio aangeskakel word nie.	● Die batterypak is pap. Vervang of herlaai batterypak. ● Die batteypak is moontlik nie behoorlik ge-installeer nie. Herinstalleer die batterypak.
Kan nie met ander radios kommunikeer nie.	● Maak seker dat u radio met die ander radio se kanaal verstellings dieselfde is. Asook dieselfde CTCSS/DCS group. ● Dat die afstand tussen u radio en die ander radios binne ontvangs gebied is.
Radio praat net kortafstand	● Maak seker dat die antenna behoorlik ingeskroef is en goeie kontak maak ● Maak seker dat u die

	oorspronklike antenna van die vervaardiger gebruik, ● Die handelaar het moontlik die radio verkeerd geprogrammeer
U hoor ander gebruikers	● Verander u radio se kanaal ● Neem u radios en u groep se radios in vir herprogrammering.
Die battery hou nie lank nie.	● Die battery se lewe is verby, vervang die battery asb. ● Die battery was nie volledig gelaai nie, herlaai battery.
Ander radios onvang u radio sag of gebroke	Maak seker dat die mikrofoon gaaitjie oop is.
Radio vol water	● Haal die battery dadelik uit. Maak droog onder ‘n waaier. Stuur radio so gou as moontlik na RTS toe vir herstelwerk.

Aanhangsel: CTCSS en DCS Lys

50 CTCSS

67.0	85.4	107.2	136.5	165.5	186.2	210.7	254.1
69.3	88.5	110.9	141.3	167.9	189.9	218.1	
71.9	91.5	114.8	146.2	171.3	192.8	225.7	
74.4	94.8	118.8	151.4	173.8	196.6	229.1	
77.0	97.4	123.0	156.7	177.3	199.5	233.6	
79.7	100.0	127.3	159.8	179.9	203.5	241.8	
82.5	103.5	131.8	162.2	183.5	206.5	250.3	

83 DCS

023	051	114	143	174	251	315	371	445	532	631	723
025	054	115	152	205	261	331	411	464	546	632	731
026	065	116	155	223	263	343	412	465	565	654	732
031	071	125	156	226	265	346	413	466	606	662	734
032	072	131	162	243	271	351	423	503	612	664	743
043	073	132	165	244	306	364	431	506	624	703	754
047	074	134	172	245	311	365	432	516	627	712	